

**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 22-Nov-14

Time 6:51 AM

**Daily Diary Report by Bid Item**

Contract No.: 04-0120F4

Diary #: 1240 Const Calendar Day: 813 Date: 26-Aug-2014 Tuesday

Inspector Name: Brignano, Bob Title: Transportation Engineer

Inspection Type:

Shift Hours: Break: Over Time:

Federal ID:

Location:

Reviewer: Schmitt, Alex Approved Date: Status: Submit

**04-0120F4  
04-SF-80-13.2/13.9  
Self-Anchored  
Suspension Bridge****Weather**

Temperature 7 AM 12 PM 4PM

Precipitation Condition overcast early am, then clear

Working Day ☒ If no, explain:**Diary:**

Dispute

**General Comments**

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:

The status of the 2 test rigs in this current phase of the Townsend Test (Test IV) is as follows:

Rod 18 (Dry 2008 Rod, ID S1-A7, Bottom): Tensioned to 0.60 Fu Today

Rod 19 (Dry 2008 Rod, ID S2-H6, Bottom): Tensioned to 0.60 Fu Today

ABF Engineer Kelvin Chen is working part time in the field and office on CCO 314.

There is work in the field for the scheduled jacking step at TR's 18 & 19. Crews at the Pier 7 warehouse are working an 8-hour shift 0600 through 1430. Working on the CCO operation today are Ironworker Jared Garrett (~0920~0940 for ~1/2 hr) and Ironworker Foreman Obra Paulk (~0920~0940 for ~1/2 hr). The non-CCO 314 operations elsewhere at the Pier 7 warehouse area at other times in the day are not covered by this diary.

VGO is on site today for the jacking step at TR's 18 & 19. From VGO, Dave Van Dyke starts work on site at ~0730. He works on the morning data reports before this morning's scheduled tensioning step. VGO is present for live data display during the jacking step at the test rigs. Then, VGO works on the data reports from the jacking step at the test rigs. VGO leaves the site ~1030. VGO continues offsite work on data and report issues. At the end of the day, VGO produces and sends the pm data reports.

For the jacking step at the 2 test rigs, present from the DJV is Luis Funes. Present from CT-METS for AE is Elijah Turner (communicate with Mistras personnel offsite). Two ABF ironworkers are present to operate the hydraulic pump, tighten the nut, and deal with any issues that may come up during the jacking operation, with VGO present to monitor the loads being used to guide the operations.

Test Rig #18 (Dry 2008 Rod, ID S1-A7, Bottom) Jacking Step:

This is the 5th jacking step and the rod is being jacked to 0.60 Fu. The post-seating of the nut target is 501.480 +10/-0 kips. The expected hydraulic pressure at this locked off force is 3,600 psi. Based on the previous jacking step (8/24/2014 - 0.55 Fu), the expected seating loss is at least 37 kips (plus some expected bleed loss during AE check), so the initial jacking target is ~540~550 kips. The tension on the rod at the start of the operation is 464 kips (the 0.55 Fu load left on the rod 2 days ago was 465 kips for a delta of -1 kip, with this tension difference possibly due to thermal differences between 8/24/2014 and today). Jacking is started at 0925. At 3,600 psi hydraulic pressure per the dial gauge, the primary strain gauges give a force of 496 kips. The hydraulic pressure is increased to 4,000 psi and the primary strain gauges give a force of 529 kips. The hydraulic pressure is increased to 4,100 psi and the primary strain gauges give a force of 542 kips. The AE is checked with the ok given at 0928. The nut is tightened. Prior



## Daily Diary Report by Bid Item

Job Name: 04-0120F4

Inspector Name Brignano, Bob

Diary #: 1240

Date: 26-Aug-2014

Tuesday

to bleeding off the jacks, the primary strain gauges give a force of 541 kips (bleed loss = 1 kip). After bleeding off the jacks, the primary strain gauges give a force of 503 kips (seating loss = 38 kips). The force is within the specified tolerance.

Test Rig #19 (Dry 2008 Rod, ID S2-H6, Bottom) Jacking Step:

This is the 5th jacking step and the rod is being jacked to 0.60 Fu. The post-seating of the nut target is 501.480 +10/-0 kips. The expected hydraulic pressure at this locked off force is 3,600 psi. Based on the previous jacking step (8/24/2014 - 0.55 Fu), the expected seating loss is at least 37 kips (plus some expected bleed loss during AE check), so the initial jacking target is ~540~550 kips. The tension on the rod at the start of the operation is 466 kips (the 0.55 Fu load left on the rod 2 days ago was 468 kips for a delta of -2 kips, with this tension difference possibly due to thermal differences between 8/24/2014 and today). Jacking is started at 0930. At 3,600 psi hydraulic pressure per the dial gauge, the primary strain gauges give a force of 493 kips. The hydraulic pressure is increased to 4,100 psi and the primary strain gauges give a force of 535 kips. The hydraulic pressure is increased to 4,150 psi and the primary strain gauges give a force of 543 kips. The AE is checked with the ok given at 0934. The nut is tightened. Prior to bleeding off the jacks, the primary strain gauges give a force of 542 kips (bleed loss = 1 kip). After bleeding off the jacks, the primary strain gauges give a force of 504 kips (seating loss = 38 kips). The force is within the specified tolerance.

A 40kW generator – MQ Power 40 – ABF ID 002051 is used briefly for the jacking operations and is on idle/standby at the test rig work area the remainder of the day. A Hydraulic Pump for running the jacks is used briefly for the jacking operations and is on idle/standby at the test rig work area the remainder of the day. A Kubota Cart is used by the ironworkers.

Note that there is k-rail at this work area. All the remaining k-rail at the CCO 314 test rig site is State owned. There are 20 pieces of 10' bought k-rail. Of the 20 pieces, 16 are installed in test rigs and 4 are spare/extra k-rail that are set aside.

To elevate k-rail and sandbags, crane mats (built from 12x12's) and timber blocking (12x12's) are used.

The crane mat and 12x12's quantities are as follows:

1 each 4'x20' crane mat (1 x 80 LF)

1 each 5'x19' crane mat (1 x 95 LF)

2 each 5'x20' crane mats (2 x 100 LF)

2 each 5'x16' crane mat (2 x 80 LF)

~64 LF additional 12x12's

Total 12x12's quantity = 599 LF ~ 600 LF

The agreed extra work with ABF is as follows:

Ironworker Jared Garrett - 0.5 hr

Ironworker Foreman Obra Paulk - 0.5 hr

Engineer Kelvin Chen - 0.5 hrs

40 kW Generator - 0.5 hr

12x12 timber - 600 LF

See the attached Extra Work Order - Signed with ABF for CCO 314 work

### INSPECTOR OT REMARK:

Office 2 hours: ABF is working a shift at the Pier 7 warehouse area between 0600 and 1430. I am in the field for a portion of the ABF shift during the test rig tensioning operation. Then, later in the day, I am in the office for a meeting with the DJV, the DJV's Bolt Consultants, BAMC, and CT-METS to go over the draft report on the A354 Grade BD bolts and rods. This report is possibly being publicly released on 8/28/2014 in a public TBPOC meeting. The meeting today to go over the report lasts until about 1800. My shift is 0700 to 1800 and my OT is 1600 to 1800.

---

## ***Daily Diary Report by Bid Item***

**Job Name:** 04-0120F4

**Inspector Name** Brignano, Bob

**Diary #:** 1240

**Date:** 26-Aug-2014

**Tuesday**

---

